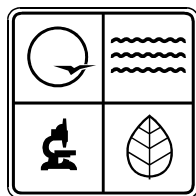


Missouri

# State Fleet Efficiency and Alternative Fuel Program

Annual Report  
Fiscal Year 2003



**Missouri Department of Natural Resources**  
Energy Center  
*"Integrity and excellence in all we do"*

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**Missouri  
State Fleet Efficiency  
and  
Alternative Fuels Program  
Fiscal Year 2003**

The Fuel Conservation for State Vehicles statute, Sections 414.400 - 414.417 RSMo, and the federal Energy Policy Act establish opportunities for Missouri state agencies to manage transportation fuel consumption better and promote the use of clean domestic alternative fuels.

All state agencies are obligated to report their progress annually to the Missouri Department of Natural Resources' Energy Center for the development of this annual report.

We are pleased to submit for your consideration this report on state fleet efficiency and alternative fuels use.

Sincerely,

ENERGY CENTER

Anita C. Randolph  
Director



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## Executive Summary

Missouri's General Assembly passed Sections 414.400 - 414.417 RSMo in 1991 to set standards for economically and environmentally responsible state fleet management. The Missouri statute seeks to increase the average fuel efficiency of the state fleet and increase the use of cleaner domestic transportation fuels in state vehicles. Missouri Revised Statutes, Section 414.406, requires that the annual state fleet report include annual fuel consumption, number of vehicles, vehicle miles traveled, average fleet fuel economy, estimated cost savings and the state's use of alternative fuels. A copy of the Missouri statute can be found in Appendix A, and state fleet data submitted to the Department of Natural Resources by the reporting agencies can be found in Appendix B.

Missouri state agencies comply annually with statutory reporting requirements by providing the Missouri Department of Natural Resources with vehicle operating data on their respective fleets. As reported to the Department of Natural Resources, state agencies operated 12,560 vehicles during the 2003 fiscal year. Of the reported vehicles, 3,777 vehicles were reported as eligible to meet the vehicle fuel efficiency and alternative fuel requirements as described in the state statute. Another 8,783 state vehicles were reported as exempt from meeting those requirements. Missouri statute allows for the exemption of state vehicles based on vehicle type and use.

Missouri state agencies also reported to the Department of Natural Resources that state employees logged a total of 39,628,813 miles while operating eligible state-owned vehicles. State-owned vehicles consumed 1,834,075 gallons of gasoline; 16,785 gallons of diesel fuel; 59,521 gallons of 85 percent ethanol (E-85); 11,275 gallons of propane; and 15,911 cubic feet of compressed natural gas.

Although biodiesel is used to refuel vehicles generally exempt under this program, biodiesel blended at levels of 20 percent or greater is defined by the U.S. Department of Energy as an alternative fuel. For reporting purposes, biodiesel used at the 20 percent or greater blend levels are combined, converted and shown throughout this report at the 100 percent blend level. When converted to the 100 percent blend level, state diesel vehicles were refueled with 111,029 gallons of biodiesel throughout the reporting period.

Vehicle fuel efficiency standards described in Section 414.400, RSMo require that agency fleets purchase new vehicles that meet or exceed those standards set by the U.S. Environmental Protection Agency (EPA). Therefore, new vehicles purchased by state agencies are to meet or exceed the corporate average fuel efficiency (CAFE) standards of 27.5 miles per gallon (mpg) for passenger cars and 20.7 mpg for light duty trucks. During the 2003 fiscal year, the overall average fuel efficiency of new vehicle acquisitions reported by agency fleets was 34.6 mpg for passenger cars and 26.8 mpg for light duty trucks. The CAFE numeric system awards additional credit to alternative fuel vehicles. This boost can significantly increase the CAFE rating of alternative fuel vehicles and accounts for the high overall efficiencies.

Alternative fuel standards described in Section 414.410, RSMo require that agency fleets purchase new vehicles that are capable of being refueled with an alternative fuel. During the fiscal year 2003 statutory period, 50 percent of all new vehicle acquisitions made by agency

fleets are to be vehicles capable of being refueled with an alternative fuel. Of the 30 reporting state agencies, 8 agencies met or exceeded the standard. Another 5 agencies did not meet the standard and 17 agencies weren't required to comply because either they did not purchase any new vehicles or they reported operating 15 or fewer eligible vehicles.

Section 414.400, RSMo requires that at least 30 percent of all fuel used in state-owned alternative fuel vehicles (AFVs) be the designated alternative fuel. During the 2003 fiscal year, 60 percent of all fuel used in state-owned AFVs was the designated alternative fuel. Biodiesel blended at the 20 percent level (B20) and used in diesel vehicles is included in this computation.

The Department of Natural Resources has worked throughout the reporting period to promote the continued and increased use of alternative fuels and has provided technical and programmatic assistance to state agencies.

The Missouri Department of Natural Resources would like to thank state agencies providing fleet vehicle operating data for this year's state fleet report. Since Missouri state fleet operations are managed at the agency level, vehicle operations data are only available through an annual data collection effort that requires the cooperation of all state agencies.



## Introduction

Missouri's General Assembly passed Sections 414.400 - 414.417 RSMo in 1991 to set standards for economically and environmentally responsible state fleet management. The Missouri statute seeks to increase the average fuel efficiency of the state fleet and increase the use of clean domestic transportation fuels in state vehicles. Chapter 414 of the Missouri Revised Statutes can be found in Appendix A of this report.

All state agencies are required to comply with the statute and are subject to one or both of the fleet-efficiency and alternative-fuel requirements. The statute covers light-duty vehicles, defined as those under 8,500 pounds gross vehicle weight rating (GVWR). The Department of Natural Resources is required to file an annual report on the Fuel Conservation for State Vehicles Program. The department has statutory authority to waive alternative fuel vehicle target acquisitions and the required percentage of alternative fuel use. The Office of Administration is required to ensure compliance with purchasing guidelines of alternative fuel vehicles and efficiency standards of conventional fuel vehicles.

The state legislation offers opportunities for state agencies to stretch operating budgets through greater fleet efficiency and to demonstrate technologies that reduce fuel consumption, manage travel efficiently and use clean domestic alternative fuels. It also offers opportunities for interagency communication and cooperation.

Based on statutory requirements<sup>1</sup>, the following are the Fuel Conservation for State Vehicles objectives:

1. *To achieve an efficient vehicle fleet.* Legislation effective Jan. 1, 1999, requires state agencies to meet minimum guidelines for efficient vehicle fleet management as established by the Department of Natural Resources.
2. *To evaluate environmental and economic effects of using alternative transportation fuels.* State government is to operate vehicles on alternative fuels such as 85 percent ethanol (E-85), propane, compressed natural gas (CNG) or others if the fuels are within the incremental life-cycle cost caps designated in the statute. Legislation effective Jan. 1, 1999, establishes the maximum incremental life-cycle cost difference at 10 percent, except for vehicles to be used in clean air maintenance and nonattainment areas of Kansas City and St. Louis, where the allowable incremental cost difference is 17 percent.

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<sup>1</sup>All agencies of Missouri state government are subject to the provisions of the program, with the exception of the departments of Transportation and Conservation, which may develop fleet management plans independently. Certain off-road vehicles, special use vehicles, law enforcement vehicles and vehicles for which no published EPA CAFE standard exists are exempt from the provisions.

3. *To increase the number of alternative fuel vehicles in state fleets.* Legislation effective Jan. 1, 1999, requires any state agency operating a fleet of more than 15 motor vehicles to acquire vehicles capable of using alternative fuels as follows<sup>2</sup>:
- At least 10 percent of the agency's fleet vehicles acquired between July 1, 1994, and July 1, 1996;
  - At least 30 percent of the agency's fleet vehicles acquired between July 1, 1996, and July 1, 1998; and
  - At least 50 percent of the agency's fleet vehicles acquired between July 1, 1998, and July 1, 2000, and each biennial period thereafter.

After July 1, 2001, at least 30 percent of the fuel used in state-owned AFVs must be an alternative fuel.

Compliance with these requirements by individual agencies and in the aggregate is documented in annual reports submitted by the agencies to the Department of Natural Resources Energy Center following the end of the fiscal year. Summary tables showing the fleet operating data submitted by the individual agencies and in the aggregate can be found in Appendix B. The 2003 fiscal year ran from July 1, 2002 through June 30, 2003.

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<sup>2</sup>The requirement may be waived for any state agency upon receipt of certification supported by acceptable evidence that:

- The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has, or can reasonably be expected to have, a central refueling station for alternative fuels;
- The agency is unable to acquire or operate vehicles within the 10 and 17 percent cost limitations using life-cycle cost methods; or
- The use of alternative fuels would not meet the energy conservation and exhaust emissions reduction criteria.

## **Annual Fuel Consumption, Number of Vehicles and Vehicle Miles Traveled**

Missouri Revised Statutes, section 414.406, requires that the Department of Natural Resources prepare an annual state fleet report that shall document annual fuel consumption, number of vehicles and vehicle miles traveled. Before documenting these vehicle operating parameters, some fundamental ideas that are important to understanding state fleet topics presented throughout the report should be explained.

The 30 state agencies that provided vehicle operating data to the Department of Natural Resources for the preparation of this year's report include the Attorney General's Office, Secretary of State, State Auditor, State Treasurer, Office of Administration, Department of Agriculture, Department of Conservation, Department of Corrections, Department of Economic Development, Department of Elementary and Secondary Education, Department of Health and Senior Services, Department of Higher Education, Department of Insurance, Department of Labor and Industrial Relations, Department of Mental Health, Department of Natural Resources, Department of Public Safety, Department of Revenue, Department of Social Services, Department of Transportation, Central Missouri State University, Harris-Stowe State College, Lincoln University, Missouri Southern State College, Missouri Western State College, Northwest Missouri State University, Southeast Missouri State University, Southwest Missouri State University, Truman State University and University of Missouri.

Some of the vehicles operated by state agencies are designated to duties that exempt the vehicles from vehicle fuel efficiency and alternative fuel requirements. These duties include off-road, maintenance, construction, trailer transport, law enforcement and emergency vehicles. Exempt vehicles also include those state vehicles that exceed the 8,500 gross vehicle weight rating (GVWR).

Eligible vehicles are those vehicles operated by state agency fleets that are required to meet state mandated vehicle fuel efficiency and alternative fuel requirements. Most eligible vehicles are primarily used for commuting from one location to another on established roadways. The terms *eligible* and *non-exempt* are used interchangeably throughout this report.

When identified throughout the report, gasoline gallon equivalence (gge) is used as a unit of measure for alternative fuels. As a unit of measure, gasoline gallon equivalence is based on the fuel's energy content rather than the at-the-pump unit of measure normally shown in unit volume. An example of this is the comparison of a gallon of 85 percent ethanol (E-85) to a gallon of gasoline. Since the energy content of E-85 is less than that of gasoline, one gallon of E-85 is equivalent to 0.7130 gallon of gasoline.

If additional information on state fleet operations is needed other than that shown throughout the written sections of this report, see the summary tables found in Appendix B.

Shown in Table 1 are the annual fuel consumption numbers for state-owned vehicles operated during fiscal year 2003. Gasoline, diesel and alternative fuel consumption are compared for non-exempt, exempt and all vehicles operated throughout the reporting period. Although all alternative fuel used to refuel AFVs is included in the table's non-exempt vehicles column, the

alternative fuel biodiesel is used to refuel diesel vehicles that are normally exempt from fuel efficiency and alternative fuel requirements. For additional information on alternative fuel consumption, see the alternative fuel section of this report or the summary tables found in Appendix B.

**Table 1. Annual Fuel Consumption  
Throughout Fiscal Year 2003**

<b>Fuel Type</b>	<b>Non-Exempt Vehicles</b>	<b>Exempt Vehicles</b>	<b>All State Vehicles</b>
Gasoline (gallons)	1,834,075	5,584,291	7,418,366
Diesel (gallons)	16,785	4,730,260	4,747,045
Alternative Fuel (gge)	51,400	119,911	171,311

Both annual fuel consumption and annual fuel cost numbers are submitted by state agencies to the Missouri Department of Natural Resources following the end of the fiscal year. Shown in Table 2 are the annual fuel costs that directly correspond to the fuel consumption numbers shown in Table 1.

**Table 2. Annual Fuel Cost  
Throughout Fiscal Year 2003**

<b>Fuel Type</b>	<b>Non-Exempt Vehicles</b>	<b>Exempt Vehicles</b>	<b>All State Vehicles</b>
Gasoline	\$2,502,673	\$6,693,435	\$9,196,108
Diesel	\$22,098	\$5,677,384	\$5,699,482
Alternative Fuel	\$107,751	\$145,269	\$253,020
<b>Total</b>	<b>\$2,632,522</b>	<b>\$12,516,088</b>	<b>\$15,148,610</b>

To provide an accurate measure of the overall fleet size, Table 3 shows the number of state-owned vehicles operated by state agencies throughout fiscal year 2003. Since the agencies were asked to submit information on all vehicles operated throughout the reporting period, the number of state vehicles shown in Table 3 includes all vehicles acquired, all vehicles in continuous service and all vehicles retired from state service throughout the period.

**Table 3. Number of Vehicles Operated  
Throughout Fiscal Year 2003**

<b>Vehicle Type</b>	<b>Non-Exempt Vehicles</b>	<b>Exempt Vehicles</b>	<b>All State Vehicles</b>
Gasoline	2,779	5,886	8,665
Diesel	20	2,595	2,615
Alternative Fuel	978	302*	1,280*
<b>Total</b>	<b>3,777</b>	<b>8,783</b>	<b>12,560</b>

\*The Missouri Department of Transportation has requested that 302 E-85 vehicles be designated as exempt vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

During fiscal year 2003, the vehicle miles traveled in eligible state vehicles were 26,895,118 miles in gasoline vehicles, 188,674 miles in diesel vehicles and 12,545,021 in alternative fuel vehicles. Since most exempt vehicles are primarily used for functions other than the shuttling of state workers from place-to-place, the agencies were not asked to submit the vehicle miles traveled in state vehicles that were exempt from fuel efficiency and alternative fuel requirements.

Annual maintenance cost data is an important part of the entire formula required to find the total operating cost for state-owned vehicles. Shown in Table 4 are the annual maintenance costs incurred for the repair and upkeep of state-owned vehicles operated throughout fiscal year 2003.

**Table 4. Annual Maintenance Cost  
Throughout Fiscal Year 2003**

<b>Vehicle Type</b>	<b>Non-Exempt Vehicles</b>	<b>Exempt Vehicles</b>	<b>All State Vehicles</b>
Gasoline	\$1,248,140	\$3,055,107	\$4,303,247
Diesel	\$17,399	\$3,595,655	\$3,613,054
Alternative Fuel	\$375,497	\$0	\$375,497
<b>Total</b>	<b>\$1,641,036</b>	<b>\$6,650,762</b>	<b>\$8,291,798</b>

Caution should be exercised when interpreting the reported maintenance cost numbers shown throughout this report since the method used for collecting and reporting maintenance cost could be different from one agency to the next. For example, most agencies enter into vehicle repair and upkeep contracts with outside organizations while some agencies employ vehicle maintenance staff who are responsible for the repair and upkeep of agency vehicles.

## Average Fleet Fuel Economy

Although a procedural process for the computation of average fleet fuel economy is not described in Missouri state statutes, the statutes do require that each agency's overall vehicle fleet fuel efficiency for non-exempt state vehicles meet or exceed the CAFE standards set by the federal government.

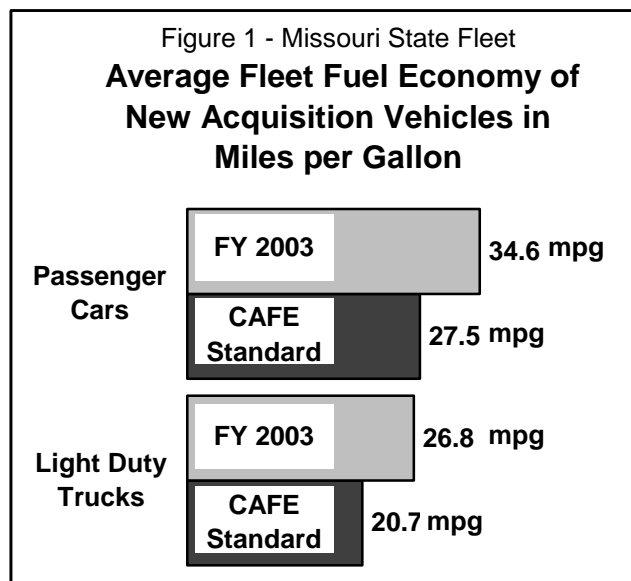
On the federal side, EPA, with assistance from the U.S. Department of Transportation, has developed a numeric system for measuring vehicle fuel efficiency. The numeric system is called corporate average fuel economy (CAFE). CAFE is a complete numeric system that was designed to measure the vehicle fuel efficiency of all vehicles sold in the United States. Since CAFE is an average, a company can sell vehicles that exceed the CAFE standards as long as their overall averages are within the standards.

The CAFE standards signed into law are 27.5 mpg for passenger cars and 20.7 mpg for light duty trucks. Light duty trucks include pickups, sport utility vehicles (SUVs) and vans.

On the state side, the Missouri Department of Natural Resources' Energy Center has developed a set of procedures for computing the average fleet fuel economy using the CAFE system of measuring vehicle fuel efficiency. Only new vehicle acquisitions are included in the computation of the average fleet fuel economy. By including only new vehicle acquisitions, procedural emphasis is placed on the purchase of vehicles that meet or exceed the federal CAFE standards.

How did Missouri state agencies do during the 2003 fiscal year? State agencies exceeded the federal standard as shown in Figure 1, by purchasing 119 new passenger cars with an overall CAFE rating of 34.6 mpg. Agencies also exceeded the federal standard with new acquisitions of light duty trucks. Agencies purchased 92 new light duty trucks that earned an overall CAFE rating of 26.8 mpg.

**If a popular state vehicle, such as the 2001 Ford Taurus has a CAFE rating of 26.2 mpg, how can the overall CAFE rating shown for new acquisition passenger cars be 34.6 mpg? The CAFE numeric system awards additional credit to alternative fuel vehicles. This boost can significantly increase the CAFE rating of alternative fuel vehicles. Some examples include: the 2003 E-85 Dodge Stratus, awarded a CAFE rating of 35.78 mpg, and the 2003 E-85 Ford Ranger pickup, awarded a CAFE rating of 28.75 mpg.**



Although the CAFE ratings earned by many agencies were able to push the state's overall total above the CAFE standard, some agencies purchased vehicles that fell below the CAFE standard. Of the 10 agencies that purchased new passenger cars, the CAFE rating of 3 agencies fell below the CAFE standard. Of the 12 agencies that purchased new light duty trucks, the CAFE rating of 3 agencies fell below the CAFE standard.

Some of the reasons given by the agencies for below standard performance include their need for heavy-duty vehicles and vehicle resale values. For additional information, the CAFE ratings earned by each agency and the total ratings earned by the entire state fleet are shown in the fuel economy tables found in Appendix C.

## Alternative Fuel Use and Alternative Fuel Vehicle Acquisitions

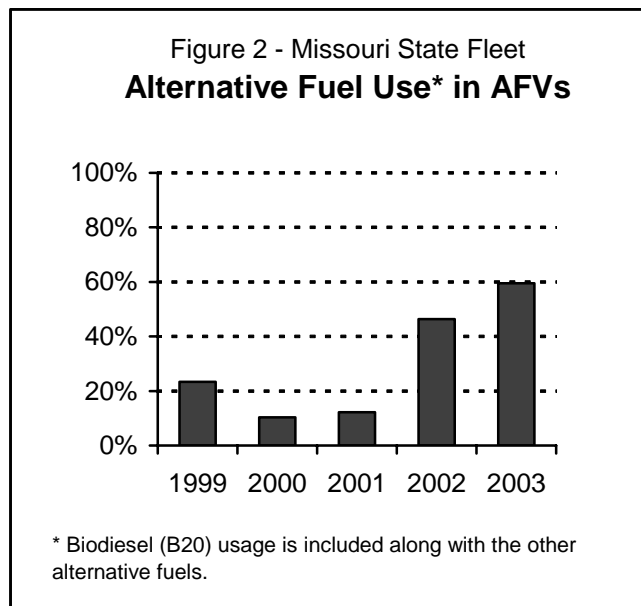
As defined by Section 414.400, RSMo alternative fuels are those motor vehicle fuels that are substantially not petroleum, thereby contributing to substantial energy security and environmental benefits. The Department of Natural Resources prepares and distributes this annual state fleet report to document progress in achieving the requirements and goals of sections 414.400 to 414.417 and shall include, along with other vehicle information, the state fleet's use of alternative fuel. Alternative fuel vehicle acquisitions and alternative fuel use percentages are shown in Appendix D.

Produced from 85 percent ethanol blended with 15 percent unleaded gasoline, E-85 is both an alternative and renewable fuel. During the 2003 fiscal year, state-owned E-85 vehicles were refueled with 59,521 gallons of E-85. Because of availability and other refueling issues, state-owned E-85 vehicles specially equipped to run on both E-85 and gasoline were also refueled with 413,349 gallons of unleaded gasoline.

Biodiesel, another alternative and renewable fuel, is pumped into the onboard fuel tanks of state-owned diesel vehicles. Although biodiesel is used to refuel state vehicles that generally are not considered eligible for this program, biodiesel blended at levels of 20 percent or greater is defined by the U.S. Department of Energy as both an alternative and renewable fuel. For reporting purposes, gallons of biodiesel used at the 20 percent or greater blend levels are combined, converted and shown throughout this report at the 100 percent blend level. When converted to the 100 percent blend level, state diesel vehicles were refueled with 111,029 gallons of biodiesel during the 2003 fiscal year reporting period.

Besides the alternative fuels that are processed from renewable sources, another group of alternative fuels works to reduce tailpipe emissions. This group of alternative fuels includes propane, compressed natural gas and electricity. During the reporting period, state vehicles used 11,275 gallons of propane, 15,911 cubic feet of compressed natural gas, and 3,280 kwh of electricity. To explain the usage disparity between fuels, propane is offered at many retail outlets throughout the state while compressed natural gas is currently offered at only one refueling site open to the public. Only **one** electric vehicle was operated throughout the reporting period.

Another important topic when reporting alternative fuel use is the percent of alternative fuel actually put into the onboard fuel tanks of state-owned vehicles. Since many AFVs can be refueled with either the designated alternative fuel or regular unleaded gasoline, state statutes specify that 30 percent of all fuel used in state-owned AFVs should be the alternative fuel. As





shown in Figure 2, alternative fuels comprised 60 percent of all vehicle fuel used in state-owned AFVs during the 2003 fiscal year.

**How did the percent of alternative fuel used in state-owned vehicles increase from 46 percent in 2002 up to 60 percent in the 2003 reporting period? Biodiesel usage increased substantially during the new reporting period. If biodiesel (B20) consumption was not included, this number would drop to 10 percent (a 5 percent decline from the prior year).**

Broken out by alternative fuel types used during the 2003 fiscal year, the fuel usage ratios of alternative fuel to gasoline were 9 percent E-85 in flexible fuel E-85 vehicles, 3 percent compressed natural gas (CNG) in dual fuel CNG vehicles and 18 percent propane in dual fuel propane vehicles.

If 30 percent is the refueling requirement for alternative fuel use in AFVs, why are some state-owned AFVs refueled with less alternative fuel? Missouri state statutes do permit state agencies to operate and base AFVs at facilities where the designated alternative fuel is not reasonably available. Many agencies are able to comply with vehicle acquisition requirements but are not yet able to comply with the 30 percent refueling goal, until additional refueling facilities are available.

Missouri state statutes also describe acquisition requirements for AFVs. During the 2003 - 2004 statutory period, at least 50 percent of all new vehicles acquired by state agencies are required to be vehicles capable of using alternative fuels. Of all 30 reporting state agencies, eight agencies met or exceeded the statutory requirement. Another five agencies did not meet the statutory requirement, and 17 agencies were not required to meet the statutory requirement because they either did not purchase any new vehicles or they reported operating 15 or fewer eligible vehicles.

**Table 5. Location of Alternative Fuel Vehicles  
Operated by the Missouri State Fleet**

	<b>FY'99</b>	<b>FY'00</b>	<b>FY'01</b>	<b>FY'02</b>	<b>FY'03</b>
Jefferson City	217	264	330	352	423
St. Louis	68	63	89	76	74
Kansas City	31	48	42	62	80
Other	275	288	355	309	703*
<b>Total</b>	<b>591</b>	<b>663</b>	<b>816</b>	<b>799</b>	<b>1,280*</b>

\*The Missouri Department of Transportation has requested that 302 E-85 vehicles be designated as exempt vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

Does location matter? As shown in Table 5, state agencies have alternative fuel vehicles stationed in locations throughout the state of Missouri. Whether alternative fuel vehicles can be refueled with the designated alternative fuel is almost entirely dependent on where the vehicles are located. State employees are best able to refuel the vehicles with the designated alternative

fuel if refueling with an alternative fuel is convenient. Vehicle location is also important since EPA has set air quality requirements for both Kansas City and St. Louis.

In addition to being the state capital, Jefferson City is the hub of state government activities. Many agencies locate at least some if not all of their vehicles in the Jefferson City area. E-85, propane and biodiesel refueling sites are all located in the Jefferson City area.

Do alternative fuel vehicles cost more to operate than traditional gasoline and diesel fuel vehicles? To compare the operating cost of alternative fuel vehicles to traditional fuel vehicles, maintenance cost data submitted by the agencies to the Missouri Energy Center can be converted into an average maintenance cost per mile. For the 2003 fiscal year, the average maintenance cost of state vehicles (not exempt from program requirements) are as follows: 0.0342 cents per mile for gasoline cars and station wagons; 0.0560 cents per mile for light duty gasoline trucks, vans and SUVs; 0.0922 cents per mile for light duty diesel vehicles; 0.0284 cents per mile for E-85 vehicles; 0.0876 cents per mile for compressed natural gas vehicles; and 0.0441 cents per mile for propane vehicles.

## **Program Status**

The Missouri Revised Statutes, Sections 414.410 - 414.417, establish guidelines for the current vehicle fuel efficiency and alternative fuel vehicles program partly administered by the Missouri Department of Natural Resources. The established program includes the writing and distribution of an annual state fleet report, vehicle fuel efficiency standards for new vehicle acquisitions, requirements for alternative fuel use in alternative fuel vehicles and purchasing requirements for the acquisition of alternative fuel vehicles.

Participating state agencies submitted annual operating data to the Office of Administration or the Department of Natural Resources on agency vehicle operations and acquisitions made during fiscal year 2003. In recent years, most vehicle purchases have met CAFE standards, and the actual average fuel efficiency for cars and light trucks is expected to significantly increase in the coming years. Compliance with the purchasing requirements is administered by the Office of Administration, Department of Transportation, Department of Conservation and higher education institutions.

The numbers and types of alternative fuel vehicles currently available to state agencies and the public from manufacturers are steadily increasing. All major U.S. vehicle manufacturers are producing alternative fuel vehicles. The number of available alternative fuel stations also is slowly increasing. E-85 refueling locations were added in Columbia and Smithville:

### **E-85 Refueling Locations**

Ballwin, MO 63011 - 15401 Clayton Road  
Columbia, MO 65203 - 200 N. Providence  
Smithville, MO 64089 - 1102 S. Hwy. 169  
Jefferson City, MO 65109 - 3714 W. Truman Blvd.  
Jefferson City, MO 65101 - 701 Eastland Drive  
Kansas City, MO 64131 - 649 E. Bannister Road

### **B20 (20 percent biodiesel) Public Pumps**

#### **Conoco-Convenient Food Mart**

3714 W. Truman Blvd., Jefferson City, Mo. 65109

#### **Thomas Oil Co.**

430 N. Lincoln, Marshall, Mo. 65340

- Numerous propane refueling sites are located throughout Missouri. The Missouri Propane Gas Association in Jefferson City publishes a directory of propane refueling locations.

The Department of Natural Resources' Energy Center and industry representatives are working to encourage further use of alternative fuels in the appropriate AFVs. Colored labels for vehicle packets are available from the Energy Center to identify AFVs and provide local directions to refueling facilities. The E-85 pumps at each gas station are more prominently labeled.

As part of an ongoing effort to increase alternative fuel usage among state employees, the Energy Center has actively promoted the use of alternative fuels in state vehicles.

During this past year, the Energy Center participated in the E-85 for \$.85/gal. promotion in Jefferson City. More than 2,000 gallons of E-85 were sold during this one-day promotion.

The Energy Center along with National Ethanol Vehicle Coalition (NEVC) and the Missouri Soybean Association hosted alternative fuel displays at selected state agency locations in Jefferson City to encourage state employees to use alternative fuels.

In addition, the Energy Center purchased alternative fuel signs for state agencies to place at their respective fleet lots. These signs remind state employees to refuel with the appropriate alternative fuel in AFVs whenever possible.

Program barriers and recommendations are discussed in Appendix E.

# **Appendices**



# **Appendix A**

## **Federal and Missouri Legislation: Comparison of Key Alternative Fuel Provisions**

**Missouri Statute  
RSMo 414.400 - 414.417**





## Federal and Missouri Alternative Fuel Acts: Comparison of Key Provisions

Clean Air Act	Energy Policy Act	Missouri Sections 414.400 - 417 RSMo, 1999
<b>Applicability</b>		
Twenty-two metropolitan areas with populations of 250,000 or more (1980 census) with either serious, severe or extreme ozone or carbon monoxide areas.	Metropolitan areas with a 1980 population of 250,000 or more.	All state-owned vehicles throughout the state.
<b>Fleets Subject to Act</b>		
Fleets of ten or more vehicles that are centrally fueled or capable of being centrally fueled.	Fleets with at least 20 vehicles that are centrally fueled or capable of being centrally fueled in a metropolitan area; however, this requirement applies only if a fleet also has at least 50 vehicles within the United States.	State-owned fleets with more than 15 vehicles.
<b>Exemptions</b>		
<p>Vehicles that are garaged at a personal residence overnight are to be considered <u>not</u> capable of central fueling.</p> <p>Law enforcement vehicles.</p> <p>Emergency vehicles.</p>	<p>Private fleet vehicles that are garaged at home overnight are exempted.</p> <p>Law enforcement vehicles. The Secretary of Energy may terminate this exemption.</p> <p>Emergency vehicles.</p>	<p>Off-road vehicles, maintenance and construction vehicles and transport trailers.</p> <p>Law enforcement vehicles.</p> <p>Emergency vehicles.</p>
<b>Fuels</b>		
Any fuel that meets the emission standard may be used, including reformulated gasoline, clean diesel, ethanol, methanol, propane, electricity and natural gas.	Alternative fuels include methanol, ethanol, natural gas, propane, biodiesel and electricity. Reformulated gasoline is not considered to be an alternative fuel.	Alternative fuels include 85 percent methanol, 85 percent ethanol, natural gas, propane, 20 percent biodiesel, hydrogen and electricity. Reformulated gasoline is not considered to be an alternative fuel.

Clean Air Act	Energy Policy Act	Missouri Sections 414.400 - 417 RSMo, 1999
<b>Weight Limits</b>		
Includes automobiles and trucks up to 26,000 pounds gross vehicle weight.	Includes vehicles with a gross vehicle weight of less than or equal to 8,500 pounds.	For reporting purposes, state agencies are including only those eligible vehicles less than or equal to 8,500 pounds (GVWR).
<b>Purchase Dates</b>		
Beginning with model year 1998.	<p>Federal fleet – 1993 State fleets - model year 1996.</p> <p>Private and municipal fleets - model year 1999 or later (subject to ruling by the secretary of energy that a private/municipal fleet program is needed.)</p> <p>Fuel provider fleets - model year 1996.</p>	<p>Acquire vehicles capable of using alternative fuels:</p> <p>10 percent by July 1, 1996 30 percent by July 1, 1998 50 percent by July 1, 2000</p> <p>By July 1, 2002, 30% of fuel used in AFVs must be an alternative fuel.</p>
<b>Vehicle And Fuel Availability</b>		
There are no exemptions provided in the law in the event vehicles or fuel are not available.	The secretary of energy must exempt a fleet if vehicles or fuels are not available.	<p>The Missouri Department of Natural Resources' director may reduce any percentage specified or waive requirements upon receipt of certification supported by evidence to the director that:</p> <ol style="list-style-type: none"> <li>1) Fuels are not available;</li> <li>2) Fuels do not meet cost limitations; or</li> <li>3) Fuels do not meet energy conservation or emissions criteria.</li> </ol>

***Missouri Revised Statutes***  
**Chapter 414**  
**Fuel Regulation and Conservation**  
**Section 414.400**

August 28, 1999

**Definitions--program for state fuel consumption reduction, fleet management and promotion of alternative fuels, University of Missouri, included duties--exceptions for certain vehicles.**

414.400. 1. As used in sections 414.400 to 414.417, the following terms mean:

- (1) "Alternative fuel", any fuel, including any alcohol fuel containing eighty-five percent or more by volume of such alcohol or other such percentage not less than seventy percent if determined by the United States Department of Energy by rule to be necessary to provide for the requirements of cold start, safety, or vehicle functions, natural gas, liquefied petroleum gas, any fuel other than alcohol derived from biological materials when designated by the United States Department of Energy as an alternative fuel, and hydrogen, or any power source, including electricity, and any other fuel that the United States Department of Energy determines by final rule is substantially not petroleum and would yield substantial energy security and environmental benefits, used in a vehicle that complies with the standards and requirements applicable to such vehicle pursuant to sections 414.400 to 414.417 when using such fuel or power source;
- (2) "CAFE standard", the federal Corporate Average Fuel Economy standard, 15 U.S.C. 2002 or 40 CFR Parts 86 and 600 or 49 CFR Part 538 or proposed rule 49 CFR Part 538 until such rule is finalized;
- (3) "Department", the department of natural resources;
- (4) "Director", the director of the department of natural resources;
- (5) "State agency", the same meaning as such term is defined in section 536.010, RSMo;
- (6) "Vehicle fleet", any fleet comprised of vehicles with a manufacturer's gross vehicle weight rating of not more than eight thousand five hundred pounds registered for operation on the highways of this state pursuant to chapter 301, RSMo.

2. The department in consultation with the commissioner of administration shall develop and implement a program to manage and progressively reduce state agency vehicle fleet fuel consumption and promote the use of alternative fuels. The program shall require state agencies to meet minimum guidelines for efficient fleet management. Such guidelines shall be updated and revised every two years and shall require the overall vehicle fleet fuel efficiency for each agency to meet or exceed the fuel efficiency that would be achieved if each vehicle in the agency's fleet met the CAFE standard. The department may promulgate rules necessary to implement such guidelines. Further, provided that suppliers or state agencies have or can reasonably be expected to have established alternative fuel refueling stations as needed, the program shall require that at least thirty percent of all motor fuel purchased annually for use in alternative fuel vehicles, calculated in gasoline gallon equivalents, to be alternative fuel by July 1, 2001. Any alternative fuel purchased by a state agency for use in vehicles not included in their vehicle fleet as defined in subsection 1 of this section, calculated in gasoline gallon equivalents, may be credited toward the annual alternative fuel purchase goal. The program shall systematically replace existing state-owned vehicles and vehicles paid for with any state

money, including vehicles purchased by the university system, with vehicles manufactured, assembled or produced in the United States, as required by sections 34.350 to 34.359, RSMo.

3. The commissioner of administration shall identify specific vehicle models within each vehicle procurement class that meet or exceed the CAFE standard. State agencies shall identify specific vehicle models within each vehicle procurement class that have a life cycle cost which is less than or equal to the average life cycle cost of those vehicles in the class which are manufactured, assembled or produced in the United States. Life cycle costs shall include but are not limited to the original cost of the vehicle, conversion cost if applicable, costs associated with vehicle emissions to the extent that such statistics are available, and projected cost of operation, including fuel cost and maintenance and salvage value to the extent that reliable maintenance and salvage value statistics are available. Unless a state agency submits to the department a fleet efficiency plan that complies with the minimum guidelines for energy efficiency established pursuant to subsection 2 of this section, or unless otherwise approved by the office of administration pursuant to subsection 4 of this section, all purchases of vehicles for state agency vehicle fleets shall meet the above standards.

4. The commissioner of administration may waive the CAFE standard requirements of subsection 3 of this section, for only those vehicles which satisfy one or more of the following conditions, for any state agency upon receipt of documentation that has been certified by the director of the state agency as satisfying one or more of the following conditions:

- (1) Such vehicles are used primarily in off-road, construction, or road maintenance applications;
- (2) Such vehicles are regularly used in the movement of maintenance or construction equipment;
- (3) Such vehicles are trucks or utility vehicles as defined by the office of administration that are regularly used to transport trailers for the purpose of moving state equipment; or
- (4) Such vehicles are vehicles with manufacturer-stated seating capacity exceeding that for six persons and the director of the agency has certified that the vehicle will be used to transport its rated capacity in persons and/or cargo. Agencies which are granted such waivers shall comply with the planning requirements of section 414.403.

5. The purchase of all class III vehicles, as defined by the office of administration, shall be approved through the appropriations process for all departments except the highway patrol. The provisions of this subsection shall not apply to the purchase of used vehicles from the highway patrol.

(L. 1991 H.B. 45 § 1, A.L. 1998 S.B. 619)

Effective 1-1-99

**Chapter 414**  
**Fuel Regulation and Conservation**  
**Section 414.403**

August 28, 1996

**Vehicle fleet energy conservation plan to be developed by each state agency, purpose of plan, content--plan to be submitted to department of natural resources, when.**

414.403. 1. Each state agency, with assistance from the department of natural resources, shall develop and implement a vehicle fleet energy conservation plan for the purposes of reducing vehicle fuel consumption. Plans shall be submitted to the director of the department of natural resources by January 1, 1993. Such plans shall include:

- (1) A timetable by which fleet vehicles shall be replaced with vehicles which exceed the average fuel economy for their vehicle class as outlined in section 414.400;
- (2) Options for the use of demonstrated innovative technologies that promote energy conservation and reduced fuel consumption;
- (3) Methods that promote efficient trip planning and state vehicle use; and
- (4) Car-pooling and van pooling for agency employees for commuting and job-related travel.

2. The department of conservation and the department of highways and transportation may develop their own vehicle fleet energy conservation plan. Such plans shall meet the objectives of sections 414.400 to 414.417 and shall comply with the reporting requirements of sections 414.400 to 414.417.

(L. 1991 H.B. 45 § 2)

**Chapter 414**  
**Fuel Regulation and Conservation**  
**Section 414.406**

**Vehicle fleet plan reviewed--office of administration to purchase only vehicles conforming to plan--annual report, content.**

414.406. 1. The director of the department of natural resources shall review each agency's vehicle fleet plan and the vehicular demands of the agency by vehicle class. The office of administration shall only purchase for an agency those vehicles which conform to the agency's plan as outlined in sections 414.400 and 414.403.

2. Each state agency shall annually file a report with the director of the department of natural resources on forms provided by the department showing its progress in achieving the requirements and goals of sections 414.400 to 414.417. The director of the department of natural resources shall compile such information into an annual report and submit such report to the commissioner of administration, the secretary of the senate, the clerk of the house of representatives and the chairman of each committee of jurisdiction of the general assembly.

3. The director's report shall document progress in achieving the requirements and goals of sections 414.400 to 414.417 and shall include, but not be limited to, annual fuel consumption, number of vehicles, vehicle miles traveled, average fleet fuel economy, estimated cost savings

and state use of alternative fuels.

(L. 1991 H.B. 45 § 3)

## **Chapter 414**

### **Fuel Regulation and Conservation**

#### **Section 414.410**

**Motor vehicle alternative fuel use plan to be developed by department of natural resources--powers and duties--state agency fleets of fifteen or more vehicles, time table for using alternative fuels.**

414.410. 1. The director shall develop a motor vehicle alternative fuel use plan. The director shall cooperate with state agency fleet operators, vehicle manufacturers and converters, fuel distributors and others to identify the types of vehicles which could be converted to alternative fuels. The director shall consider range, specialty uses, fuel availability, vehicle cost, vehicle manufacturing and conversion capability, safety, resale values, and other relevant factors.

2. The department shall recommend alternative fuels which state agencies and state universities may consider when purchasing vehicles. The department shall consider the content of vehicle exhaust emissions, the relative efficiency of the fuel, the relative efficiency of the processes required to produce the fuel and the characteristics of air emissions associated with the production of that fuel. It shall recommend for state use those alternative fuels which best satisfy the goals of energy conservation and emissions reduction.

3. Any state agency which operates a fleet of more than fifteen motor vehicles shall acquire vehicles capable of using alternative fuels as follows:

(1) At least ten percent of the agency's fleet vehicles acquired between July 1, 1994, and July 1, 1996;

(2) At least thirty percent of the agency's fleet vehicles acquired between July 1, 1996, and July 1, 1998; and

(3) At least fifty percent of the agency's fleet vehicles acquired between July 1, 1998, and July 1, 2000, and each biennial period thereafter.

If a state agency exceeds any such biennial acquisition goal, or has purchased vehicles capable of using alternative fuels before July 1, 1994, such purchases may be credited to any future biennial acquisition goal. If a state agency has purchased vehicles capable of using alternative fuels but not included in their vehicle fleet as defined in subsection 1 of section 414.400, such purchases may be credited toward any biennial acquisition goal. If a state agency fails to meet a biennial acquisition goal, the commissioner of administration shall not authorize for such agency the purchase of any vehicle not capable of using alternative fuels until such acquisition goal is met, unless the director has reduced or waived the acquisition goal pursuant to subsection 1 of section 414.412.

(L. 1991 H.B. 45 § 4 subsecs. 1, 2, 3, A.L. 1998 S.B. 619)

Effective 1-1-99

**Chapter 414**  
**Fuel Regulation and Conservation**  
**Section 414.412**

**Alternative use of fuel, waived or percentage reduced by director of natural resources, certified evidence required--other vehicles, ethanol use required, exceptions.**

414.412. 1. The director may reduce any percentage specified or waive the requirement of subsection 3 of section 414.410 for any state agency upon receipt of certification supported by evidence acceptable to the director that:

(1) The agency's vehicles will be operating primarily in an area in which neither the agency nor a supplier has or can reasonably be expected to have a central refueling station for alternative fuels; or

(2) The agency is unable to acquire or operate vehicles within the cost limitations of section 414.400 or section 414.415; or

(3) The use of alternative fuels would not meet the energy conservation and exhaust emissions reduction criteria of subsection 2 of section 414.410.

2. State agencies shall submit information describing the acquisition and use of vehicles capable of using alternative fuels to the department in a format prescribed by the department. The report shall include for each vehicle model capable of using alternative fuel:

(1) The types of alternative fuels used;

(2) The number of miles traveled using alternative fuels and the ratios to the total numbers of miles traveled;

(3) The number of vehicles owned which are capable of using alternative fuels;

(4) Maintenance costs.

3. Each state-owned vehicle equipped to operate on gasoline, other than vehicles using alternative fuel, shall use a fuel ethanol blend as defined in section 142.027, RSMo, when available at a competitive price, as its motor fuel, unless the United States Environmental Protection Agency, or the governor by executive order, promulgates rules which prohibit, limit or otherwise regulate the use of ethanol-blended fuels in ozone nonattainment areas, as defined by Section 107 of the federal Clean Air Act, as amended, or in an\* area designated as a maintenance area for ozone under Section 175A of the federal Clean Air Act, as amended, state-owned vehicles shall not be required to use a fuel ethanol blend.

(L. 1991 H.B. 45 § 4 subsecs. 4, 5, 6, A.L. 1993 H.B. 611, A.L. 1998 S.B. 619)

Effective 1-1-99

## **Chapter 414**

### **Fuel Regulation and Conservation**

#### **Section 414.415**

**Percentage requirements, how state agencies to comply.**

414.415. State agencies may meet the percentage requirements of sections 414.410 to 414.415 through purchase of original equipment manufactured alternative fuel vehicles or the conversion of vehicles, in accordance with federal and state requirements and applicable safety laws. Vehicles purchased pursuant to sections 414.410 to 414.415 shall not exceed the cost of conventional fuel vehicles of the same make and model by more than ten percent, using life cycle costing methods calculated pursuant to criteria in subsection 3 of section 414.400, except that vehicles purchased pursuant to sections 414.410 to 414.415 that are based for the life of the vehicle and used primarily in maintenance and nonattainment areas defined with regard to the National Ambient Air Quality Standards of the federal Clean Air Act, as amended, 42 U.S.C. 7401 et seq., shall not exceed such cost of conventional fuel vehicles of the same make and model by more than seventeen percent. The commissioner of administration in purchasing, leasing, maintaining or converting vehicles for alternative fuels use shall comply with all applicable safety standards promulgated by the United States Department of Transportation.

(L. 1991 H.B. 45 § 4 subsec. 7, A.L. 1998 S.B. 619)

Effective 1-1-99

## **Chapter 414**

### **Fuel Regulation and Conservation**

#### **Section 414.417**

**Criminal law enforcement vehicles and certain other vehicles, law not applicable--  
demonstration vehicles for alternative fuels authorized.**

414.417. 1. Sections 414.400 to 414.417 shall not apply to the purchase or lease of a vehicle to be used primarily for criminal law enforcement or to the purchase or lease of a motorcycle, all-terrain vehicle, ambulance, or any type of vehicle for which the Environmental Protection Agency has not published fuel economy comparisons.

2. Notwithstanding the provisions of sections 414.400 to 414.417, the department of natural resources may acquire vehicles which use alternative fuels for the purposes of assessing and demonstrating either or both alternative vehicles and alternative fuels.

(L. 1991 H.B. 45 § 5)



## **Appendix B**

### **State Fleet Summary Tables and Fleet Data by State Agency**



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## SUMMARY TABLE VEHICLE OPERATIONS

## MISSOURI STATE FLEET FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	1,069	11,858,988	469,012		\$633,224		\$405,544
Gasoline	Light Duty Trucks, Vans and SUVs	1,710	15,036,130	907,342		\$1,252,000		\$842,596
Diesel	Light Duty Vehicles, Not Otherwise Exempted	20	188,674	16,785		\$22,098		\$17,399
E85	E85 Flex Fuel Vehicles	890	11,660,513	413,349	59,521	\$557,114	\$91,004	\$330,799
CNG	Dual Fuel and Dedicated CNG Vehicles	15	136,014	4,443	15,911	\$5,971	\$152	\$11,921
Propane	Dual Fuel and Dedicated Propane Vehicles	72	743,298	39,929	11,275	\$54,364	\$16,365	\$32,777
Electric	Dedicated Electric Vehicles	1	5,196		3,280		\$230	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	4,500	1,688	5,584,291	\$6,693,435	\$3,055,107
Diesel	25	2,570	4,730,260	\$5,677,384	\$3,595,655
B100			111,029	\$145,269	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## ATTORNEY GENERAL FISCAL YEAR 2003

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Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	0	0	0		\$0		\$0
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	33	1	19,706	\$26,966	\$20,795
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

SECRETARY OF STATE  
FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	6	62,803	2,305		\$3,247		\$3,453
Gasoline	Light Duty Trucks, Vans and SUVs	3	29,981	1,118		\$1,578		\$1,913
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	4	81,236	3,352	0	\$4,738	\$0	\$1,512
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	1	979	\$1,340	\$762
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

**STATE AUDITOR  
FISCAL YEAR 2003**

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	1	16,508	640		\$973		\$466
Gasoline	Light Duty Trucks, Vans and SUVs	2	24,824	1,102		\$1,625		\$1,564
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	1	16,115	704	0	\$1,053	\$0	\$152
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	0	0	\$0	\$0
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004



## SUMMARY TABLE VEHICLE OPERATIONS

**STATE TREASURER  
FISCAL YEAR 2003**

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	1	1,271	123		\$193		\$383
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	1	9,899	156	229	\$190	\$324	\$276
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	0	0	\$0	\$0
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF AGRICULTURE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	66	965,204	37,512		\$50,197		\$27,522
Gasoline	Light Duty Trucks, Vans and SUVs	79	1,289,907	72,109		\$99,210		\$57,151
Diesel	Light Duty Vehicles, Not Otherwise Exempted	1	25,169	3,976		\$5,547		\$0
E85	E85 Flex Fuel Vehicles	72	1,359,347	44,230	3,561	\$60,151	\$5,232	\$28,772
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	8	2	9,263	\$13,469	\$5,310
Diesel	0	8	19,024	\$21,449	\$15,761
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF CONSERVATION FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	20	171,326	7,138		\$9,283		\$10,620
Gasoline	Light Duty Trucks, Vans and SUVs	88	901,809	49,064		\$69,417		\$41,064
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	70	755,942	29,031	2,184	\$38,920	\$2,929	\$13,316
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	788	300	1,087,744	\$1,436,906	\$655,050
Diesel	0	96	169,140	\$225,365	\$134,581
B100			1,181	\$1,389	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF CORRECTIONS FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	85	1,019,589	46,168		\$65,533		\$35,158
Gasoline	Light Duty Trucks, Vans and SUVs	252	2,785,582	189,513		\$269,229		\$120,691
Diesel	Light Duty Vehicles, Not Otherwise Exempted	1	8,767	995		\$1,423		\$381
E85	E85 Flex Fuel Vehicles	47	407,758	16,497	2,033	\$24,755	\$2,963	\$14,700
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	23	342,547	16,103	6,648	\$26,597	\$11,972	\$6,441
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	235	179	245,572	\$359,885	\$163,307
Diesel	0	87	209,064	\$343,001	\$79,491
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF ECONOMIC DEVELOPMENT FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	70	907,213	34,794		\$49,159		\$28,613
Gasoline	Light Duty Trucks, Vans and SUVs	21	257,255	14,566		\$20,917		\$10,837
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	43	585,242	20,309	3,863	\$28,510	\$5,906	\$10,050
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	2	1	2,795	\$4,174	\$2,484
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	29	318,778	11,619		\$16,317		\$10,145
Gasoline	Light Duty Trucks, Vans and SUVs	28	273,707	14,689		\$20,378		\$12,036
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	18	286,303	10,151	0	\$15,144	\$0	\$8,677
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	4	16	9,979	\$13,957	\$7,446
Diesel	0	69	54,103	\$76,302	\$33,535
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF HEALTH AND SENIOR SERVICES FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	45	660,974	22,967		\$32,258		\$16,799
Gasoline	Light Duty Trucks, Vans and SUVs	23	271,469	14,119		\$20,437		\$10,859
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	20	359,339	13,241	0	\$18,754	\$0	\$7,230
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	3	4,159	\$5,856	\$5,454
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF HIGHER EDUCATION FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	6	69,088	2,937		\$4,309		\$5,178
Gasoline	Light Duty Trucks, Vans and SUVs	1	11,647	524		\$747		\$1,093
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	6	77,270	3,007	259	\$4,199	\$396	\$5,996
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	0	0	\$0	\$0
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004



## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF INSURANCE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	3	22,890	786		\$1,071		\$653
Gasoline	Light Duty Trucks, Vans and SUVs	0	0	0		\$0		\$0
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	3	34,556	1,168	262	\$1,639	\$377	\$5,828
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	0	0	\$0	\$0
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	13	165,455	5,752		\$8,179		\$3,885
Gasoline	Light Duty Trucks, Vans and SUVs	19	206,208	10,337		\$14,462		\$7,736
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	3	49,182	1,222	1,095	\$1,719	\$1,612	\$932
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	1	233	\$335	\$2,643
Diesel	0	1	1,453	\$1,997	\$2,083
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF MENTAL HEALTH FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	289	2,658,763	118,120		\$160,197		\$100,580
Gasoline	Light Duty Trucks, Vans and SUVs	265	1,722,144	112,746		\$147,706		\$132,003
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	125	1,664,519	64,651	4,235	\$86,089	\$6,124	\$50,133
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	41	118	60,214	\$76,357	\$59,479
Diesel	1	12	9,008	\$12,606	\$9,246
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF NATURAL RESOURCES FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	54	684,067	23,766		\$32,395		\$22,229
Gasoline	Light Duty Trucks, Vans and SUVs	157	1,955,101	109,164		\$145,339		\$73,966
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	118	1,855,643	63,106	15,190	\$84,755	\$22,357	\$56,411
CNG	Dual Fuel and Dedicated CNG Vehicles	12	112,611	3,224	15,911	\$4,478	\$152	\$10,783
Propane	Dual Fuel and Dedicated Propane Vehicles	45	387,731	23,827	3,977	\$27,766	\$3,741	\$25,808
Electric	Dedicated Electric Vehicles	1	5,196		3,280		\$230	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	174	147	239,284	\$279,949	\$133,196
Diesel	0	55	49,274	\$58,793	\$83,415
B100			584	\$778	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF PUBLIC SAFETY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	44	635,901	21,869		\$30,720		\$24,474
Gasoline	Light Duty Trucks, Vans and SUVs	48	521,882	17,225		\$23,650		\$24,662
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	30	498,210	18,009	328	\$24,589	\$456	\$11,478
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	1,244	83	1,699,520	\$1,984,921	\$413,716
Diesel	2	13	4,584	\$6,140	\$8,112
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF REVENUE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	5	65,071	2,839		\$3,453		\$3,848
Gasoline	Light Duty Trucks, Vans and SUVs	11	161,664	8,002		\$9,720		\$5,785
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	39	556,688	21,993	1,195	\$26,615	\$1,767	\$20,377
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	2	2,571	\$3,170	\$281
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF SOCIAL SERVICES FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	54	592,527	22,672		\$31,582		\$21,826
Gasoline	Light Duty Trucks, Vans and SUVs	51	455,457	24,960		\$34,343		\$23,199
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	50	601,808	21,854	1,274	\$30,622	\$1,846	\$26,066
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	123	125	136,796	\$191,578	\$135,723
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## DEPARTMENT OF TRANSPORTATION FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	65	1,067,119	42,282		\$46,877		\$12,175
Gasoline	Light Duty Trucks, Vans and SUVs	29	350,432	24,955		\$28,135		\$9,312
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	128	1,082,686	32,058	17,269	\$37,320	\$29,123	\$16,206
CNG	Dual Fuel and Dedicated CNG Vehicles	3	23,403	1,219	0	\$1,493	\$0	\$1,138
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	1,117	469	1,732,162	\$1,833,765	\$824,554
Diesel	0	2,157	4,095,877	\$4,785,970	\$3,116,135
B100			105,133	\$138,269	

System Query Date: Thursday, June 24, 2004



## SUMMARY TABLE VEHICLE OPERATIONS

## OFFICE OF ADMINISTRATION FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	15	112,191	5,809		\$7,392		\$6,932
Gasoline	Light Duty Trucks, Vans and SUVs	48	235,515	16,357		\$23,018		\$23,058
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	48	737,779	23,747	6,544	\$33,433	\$9,590	\$25,691
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	0	11	4,079	\$3,515	\$24,268
Diesel	0	3	22,327	\$29,816	\$1,285
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## CENTRAL MISSOURI STATE UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	6	15,375	808		\$929		\$854
Gasoline	Light Duty Trucks, Vans and SUVs	7	35,096	2,366		\$2,721		\$647
Diesel	Light Duty Vehicles, Not Otherwise Exempted	4	31,937	2,095		\$2,514		\$1,475
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	4	13,020	0	651	\$0	\$652	\$528
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	104	9	273	\$313	\$760
Diesel	3	2	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## HARRIS-STOWE STATE COLLEGE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	3	15,000	1,600		\$2,400		\$1,500
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	1	0	600	\$900	\$500
Diesel	0	0	0	\$0	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## LINCOLN UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	2	22,860	220		\$267		\$387
Gasoline	Light Duty Trucks, Vans and SUVs	2	31,176	1,310		\$1,577		\$389
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	29	2	8,876	\$10,737	\$7,980
Diesel	0	1	663	\$1,247	\$27
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## MISSOURI SOUTHERN STATE COLLEGE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	9	86,733	4,053		\$4,337		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	0	0	0		\$0		\$0
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	15	10	8,725	\$9,336	\$0
Diesel	0	1	1,155	\$1,005	\$0
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## MISSOURI WESTERN STATE COLLEGE FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	0	0	0		\$0		\$0
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	22	0	8,081	\$10,101	\$4,687
Diesel	0	5	4,822	\$6,028	\$4,984
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## NORTHWEST MISSOURI UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	13	132,189	4,413		\$5,806		\$1,691
Gasoline	Light Duty Trucks, Vans and SUVs	13	116,219	8,998		\$9,253		\$2,707
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	12	198,224	6,612	0	\$8,973	\$0	\$1,477
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	51	15	18,063	\$24,107	\$16,578
Diesel	1	12	45,843	\$51,119	\$23,058
B100			4,131	\$4,833	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## SOUTHEAST MISSOURI STATE UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	0	0	0		\$0		\$0
Diesel	Light Duty Vehicles, Not Otherwise Exempted	0	0	0		\$0		\$0
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	144	6	42,485	\$57,509	\$94,025
Diesel	0	1	565	\$765	\$354
B100			0	\$0	

System Query Date: Thursday, June 24, 2004



## SUMMARY TABLE VEHICLE OPERATIONS

## SOUTHWEST MISSOURI STATE UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	2	3,303	142		\$203		\$844
Gasoline	Light Duty Trucks, Vans and SUVs	30	156,496	8,599		\$12,298		\$11,397
Diesel	Light Duty Vehicles, Not Otherwise Exempted	1	1,255	712		\$1,020		\$422
E85	E85 Flex Fuel Vehicles	0	0	0	0	\$0	\$0	\$0
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	90	1	49,997	\$71,509	\$37,145
Diesel	8	0	2,031	\$2,905	\$3,377
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## TRUMAN STATE UNIVERSITY FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	0	0	0		\$0		\$0
Gasoline	Light Duty Trucks, Vans and SUVs	17	259,882	15,487		\$37,568		\$8,213
Diesel	Light Duty Vehicles, Not Otherwise Exempted	2	43,050	4,201		\$5,994		\$6,106
E85	E85 Flex Fuel Vehicles	8	142,311	5,432	0	\$7,656	\$0	\$5,447
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	16	2	6,348	\$8,692	\$10,085
Diesel	1	0	721	\$1,088	\$359
B100			0	\$0	

System Query Date: Thursday, June 24, 2004

## SUMMARY TABLE VEHICLE OPERATIONS

## UNIVERSITY OF MISSOURI FISCAL YEAR 2003

Many management functions of the Missouri state fleet are decentralized. Day-to-day decisions and record keeping tasks are performed by each agency. Therefore, the operations data used to generate this table were provided by the Missouri state agencies that use on-road and off-road motor vehicles to accomplish their official duties.

Estimated values are shown on two summary tables - the Missouri Department of Transportation table and the overall Missouri State Fleet table. Using information provided by the Missouri Department of Transportation, the operating figures shown for E85 vehicles and exempt gasoline vehicles are estimated values. In addition to estimated values, the Missouri Department of Transportation ordered that 302 E85 vehicles be designated as exempt gasoline vehicles. These vehicles are therefore treated as exempt gasoline vehicles throughout the report.

### ELIGIBLE VEHICLES

Eligible vehicles include only those vehicles that are eligible to meet vehicle fuel efficiency and alternative fuel requirements specified in RSMo 414.400-414.417. At-the-pump units are cubic feet for CNG; kwh for electric; and gallons for gasoline, diesel, E85 and propane.

Vehicle Type	Description	Number of Vehicles	Miles Traveled	Fuel Consumption (at-the-pump units)		Cost		
				Gas or Diesel	Alternative Fuel	Gas or Diesel	Alternative Fuel	Maintenance
Gasoline	Cars and Station Wagons	167	1,403,061	49,402		\$68,540		\$67,210
Gasoline	Light Duty Trucks, Vans and SUVs	512	2,966,406	188,310		\$256,079		\$260,432
Diesel	Light Duty Vehicles, Not Otherwise Exempted	11	78,496	4,806		\$5,601		\$9,015
E85	E85 Flex Fuel Vehicles	44	300,456	12,818	0	\$17,292	\$0	\$20,072
CNG	Dual Fuel and Dedicated CNG Vehicles	0	0	0	0	\$0	\$0	\$0
Propane	Dual Fuel and Dedicated Propane Vehicles	0	0	0	0	\$0	\$0	\$0
Electric	Dedicated Electric Vehicles	0	0		0		\$0	\$0

### EXEMPT VEHICLES

Exempt vehicles are those vehicles that for reasons given in RSMo 414.400 - 414.417 are exempt from vehicle fuel efficiency and alternative fuel requirements. As reported by the agencies, vehicle operating data are shown for more than 98 percent of all exempt vehicles operated by the state. Central Missouri State University was the only agency that was unable to provide complete operating data.

Motor Fuel	Number of Vehicles		Fuel Consumption (gallons)	Cost	
	<= 8500 lbs	> 8500 lbs		Motor Fuel	Maintenance
Gasoline	259	184	185,789	\$264,089	\$428,878
Diesel	9	47	40,608	\$51,789	\$79,852
B100			0	\$0	

System Query Date: Thursday, June 24, 2004



## **Appendix C**

### **Average Fleet Fuel Economy of New Acquisitions**



**AVERAGE FLEET FUEL ECONOMY  
NEW ACQUISITION PASSENGER CARS**

**MISSOURI STATE FLEET  
FISCAL YEAR 2003**

Shown in RSMo 414.400 - 414.417, " the overall vehicle fuel efficiency for each agency to meet or exceed the fuel efficiency that would be achieved if each vehicle in the agency's fleet met the CAFE standard." The CAFE standard for newly built passenger cars is 27.5 MPG. Throughout the following table, the average vehicle fuel efficiency of all new acquisition passenger cars is shown for each agency. Passenger cars include both cars and station wagons that are eligible to meet vehicle fuel efficiency standards. If an agency is not shown, the agency did not acquire any new passenger cars that were eligible to meet state vehicle fuel efficiency requirements throughout the fiscal year.

DEPARTMENT OF AGRICULTURE	35.8
DEPARTMENT OF CONSERVATION	35.8
DEPARTMENT OF CORRECTIONS	32.5
DEPARTMENT OF ECONOMIC DEVELOPMENT	30.7
DEPARTMENT OF HIGHER EDUCATION	26.0
DEPARTMENT OF MENTAL HEALTH	35.8
DEPARTMENT OF TRANSPORTATION	35.8
NORTHWEST MISSOURI UNIVERSITY	31.4
SOUTHWEST MISSOURI STATE UNIVERSITY	27.1
UNIVERSITY OF MISSOURI	26.5
MISSOURI STATE FLEET	34.6

System Query Date: Thursday, June 24, 2004

**AVERAGE FLEET FUEL ECONOMY  
NEW ACQUISITION LIGHT DUTY TRUCKS**

**MISSOURI STATE FLEET  
FISCAL YEAR 2003**

Shown in RSMo 414.400 - 414.417, " the overall vehicle fuel efficiency for each agency to meet or exceed the fuel efficiency that would be achieved if each vehicle in the agency's fleet met the CAFE standard." The CAFE standard for newly built light duty trucks is 20.7 MPG. Throughout the following table, the average vehicle fuel efficiency of all new acquisition light duty trucks is shown for each agency. Light duty trucks include trucks, vans and SUVs that are eligible to meet vehicle fuel efficiency standards. If an agency is not shown, the agency did not acquire, throughout the fiscal year, any new light duty trucks that were eligible to meet state vehicle fuel efficiency requirements.

DEPARTMENT OF AGRICULTURE	19.9
DEPARTMENT OF CONSERVATION	33.0
DEPARTMENT OF CORRECTIONS	26.2
DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION	33.0
DEPARTMENT OF MENTAL HEALTH	33.0
DEPARTMENT OF NATURAL RESOURCES	26.0
DEPARTMENT OF PUBLIC SAFETY	26.1
DEPARTMENT OF TRANSPORTATION	26.0
OFFICE OF ADMINISTRATION	33.0
MISSOURI WESTERN STATE COLLEGE	19.1
SOUTHWEST MISSOURI STATE UNIVERSITY	20.0
UNIVERSITY OF MISSOURI	25.0
MISSOURI STATE FLEET	26.8

System Query Date: Thursday, June 24, 2004



## **Appendix D**

### **Percent Alternative Fuel Vehicle Acquisitions and Alternative Fuel Usage**



**PERCENT ALTERNATIVE FUEL VEHICLES  
OF ALL NEW VEHICLE ACQUISITIONS**

**MISSOURI STATE FLEET  
STATUTORY PERIOD 2003 - 2004**

Since agencies that operate less than 16 eligible vehicles are not subject to program acquisition requirements described in RSMo 414.400 - 414.417, only agencies that operate greater than 15 eligible vehicles are shown in the following table. Shown in RSMo 414.410, at least 50 percent of an agency's fleet vehicle acquisitions over a two year statutory period shall be vehicles capable of using alternative fuels.

DEPARTMENT OF AGRICULTURE	60%
DEPARTMENT OF CONSERVATION	100%
DEPARTMENT OF CORRECTIONS	50%
DEPARTMENT OF ECONOMIC DEVELOPMENT	27%
DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION	100%
DEPARTMENT OF HEALTH AND SENIOR SERVICES	No Purchases
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS	No Purchases
DEPARTMENT OF MENTAL HEALTH	100%
DEPARTMENT OF NATURAL RESOURCES	33%
DEPARTMENT OF PUBLIC SAFETY	50%
DEPARTMENT OF REVENUE	No Purchases
DEPARTMENT OF SOCIAL SERVICES	No Purchases
DEPARTMENT OF TRANSPORTATION	100%
OFFICE OF ADMINISTRATION	100%
CENTRAL MISSOURI STATE UNIVERSITY	No Purchases
NORTHWEST MISSOURI STATE UNIVERSITY	33%
SOUTHWEST MISSOURI STATE UNIVERSITY	0%
TRUMAN STATE UNIVERSITY	No Purchases
UNIVERSITY OF MISSOURI	33%

System Query Date: Friday, February 26, 2004

**PERCENT ALTERNATIVE FUEL VEHICLES  
OF ALL NEW VEHICLE ACQUISITIONS**

**MISSOURI STATE FLEET  
STATUTORY PERIOD 2001 - 2002**

Since agencies that operate less than 16 eligible vehicles are not subject to program acquisition requirements described in RSMo 414.400 - 414.417, only agencies that operate greater than 15 eligible vehicles are shown in the following table. Shown in RSMo 414.410, at least 50 percent of an agency's fleet vehicle acquisitions over a two year statutory period shall be vehicles capable of using alternative fuels.

DEPARTMENT OF AGRICULTURE	69%
DEPARTMENT OF CONSERVATION	93%
DEPARTMENT OF CORRECTIONS	0%
DEPARTMENT OF ECONOMIC DEVELOPMENT	83%
DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION	0%
DEPARTMENT OF HEALTH AND SENIOR SERVICES	33%
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS	56%
DEPARTMENT OF MENTAL HEALTH	52%
DEPARTMENT OF NATURAL RESOURCES	64%
DEPARTMENT OF PUBLIC SAFETY	0%
DEPARTMENT OF REVENUE	100%
DEPARTMENT OF SOCIAL SERVICES	20%
DEPARTMENT OF TRANSPORTATION	33%
OFFICE OF ADMINISTRATION	73%
CENTRAL MISSOURI STATE UNIVERSITY	No Purchases
NORTHWEST MISSOURI STATE UNIVERSITY	62%
SOUTHWEST MISSOURI STATE UNIVERSITY	50%
TRUMAN STATE UNIVERSITY	44%
UNIVERSITY OF MISSOURI	14%

System Query Date: Friday, December 17, 2002

**PERCENT ALTERNATIVE FUEL USAGE  
IN ALTERNATIVE FUEL VEHICLES**

**MISSOURI STATE FLEET  
FISCAL YEAR 2003**

Since agencies that operate less than 16 eligible vehicles are not subject to the 30 percent alternative fuel usage requirement described in RSMo 414.400 - 414.417, only agencies that operate greater than 15 eligible vehicles are shown in the following table. Biodiesel (B20) is included as an alternative fuel even though it is exclusively used to refuel diesel vehicles.

DEPARTMENT OF AGRICULTURE	5%
DEPARTMENT OF CONSERVATION	22%
DEPARTMENT OF CORRECTIONS	17%
DEPARTMENT OF ECONOMIC DEVELOPMENT	12%
DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION	0%
DEPARTMENT OF HEALTH AND SENIOR SERVICES	0%
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS	39%
DEPARTMENT OF MENTAL HEALTH	4%
DEPARTMENT OF NATURAL RESOURCES	16%
DEPARTMENT OF PUBLIC SAFETY	1%
DEPARTMENT OF REVENUE	4%
DEPARTMENT OF SOCIAL SERVICES	4%
DEPARTMENT OF TRANSPORTATION	95%
OFFICE OF ADMINISTRATION	16%
CENTRAL MISSOURI STATE UNIVERSITY	100%
NORTHWEST MISSOURI STATE UNIVERSITY	78%
SOUTHWEST MISSOURI STATE UNIVERSITY	0%
TRUMAN STATE UNIVERSITY	0%
UNIVERSITY OF MISSOURI	0%

System Query Date: Monday, May 4, 2004



# **Appendix E**

## **Program Barriers and Recommendations**





## **Program Barriers**

- The limitations of public transportation, including scheduling and lack of local transportation in metropolitan areas, often inhibit this means for conducting state business as an effective way of reducing state fleet fuel consumption.
- In some cases, the Office of Administration does not receive any bids for certain vehicle classes that are CAFE compliant. If an agency feels a vehicle from a more fuel-efficient class cannot meet their needs, the agency submits a waiver request to acquire less efficient vehicles. (EPA publishes the CAFE figures, which can be found at its internet site. The published CAFE figures should not be confused with those figures published in the Fuel Economy Guide or on the actual vehicle sticker.)
- The statutory limitations on the incremental cost differential may still prevent the procurement of some types of alternative fuel vehicles. For example, many CNG vehicles still exceed the allowable 17 percent incremental cost cap in the two metropolitan areas.
- Lack of adequate refueling infrastructure, especially for CNG and E-85, has slowed progress in the use of alternative fuels. Six public E-85 stations in five areas are currently available for refueling. Convenience and driving distance to public stations remain barriers.
- This was the first year for the online state fleet reporting system through the Office of Administration. Since it was the first time for agencies to use the system, it slowed the reporting process.

## **Program Recommendations**

The following recommendations are based primarily on guidance provided within Missouri Revised Statute, Sections 414.400 – 414.417, and the annual reports submitted by the agencies to the Energy Center.

- Carpool or mass transit employees for work-related travel.
- Expand the use of telecommunications systems to decentralize work and reduce the need for travel to meetings, conferences and other offices. Consider options such as e-mails, facsimile, and teleconferencing to reduce the need for travel.
- The Missouri Revised Statute, Section 414.400, sets the minimum annual fuel requirement for AFVs of 30 percent alternative fuel by July 1, 2001. The Energy Center continues to encourage the agencies to promote the use of alternative fuel as a replacement for traditional vehicle fuels when alternative fuels are available. The statute sets the requirement for annual alternative fuel vehicle acquisitions to 50 percent of all eligible vehicles and the Energy Center continues to encourage the agencies to comply with alternative fuel vehicle acquisition requirements.
- To promote alternative fuel use, state staff who commute frequently in state vehicles may

require training on the operation of alternative fuel vehicles, tracking of alternative fuel use and refueling with alternative fuels. Qualified staff at the Energy Center are available to provide alternative fuel issues training as requested by the agencies.

- Following the end of the fiscal year, the Energy Center requests that fleet operations data on vehicle operations and exempted vehicles be submitted by the agencies on or before the first day of September.
- To maximize alternative fuel usage in alternative fuel vehicles, the Energy Center encourages agencies to base alternative fuel vehicles at agency locations that are closest to refueling locations selling the alternative fuel used. One mechanism to assist in this process would be for agencies to create a map of their fleet locations with alternative fuel vehicles.
- The Energy Center also encourages the administrative staff of all agencies to promote, encourage and support the refueling of agency alternative fuel vehicles with the designated alternative fuel whenever agency staff drive and refuel these vehicles.
- Create a uniform tracking system for all state agencies. The Office of Administration fleet manager has implemented this system.